Pregnant and nursing women frequently complain of excessive sensitiveness of their teeth to changes of temperature and to sweets and acids. This condition is usually due either to an unclean condition of the mouth, with acid fermentation; to food debris, or to dental decay either superficial or progressive in its character. This may be overcome by thorough cleanliness of the mouth, the treatment and filling of the decayed teeth and the use of bicarbonate of soda, milk of magnesia, or lime water, as indicated on a preceding page.

In the brief time allotted to me for the presentation of this subject, I have been able to touch only a few of the high places. The paper is, therefore, more or less incomplete and might, with advantage, be considerably elaborated.

If, however, I have interested you sufficiently in this matter to cause you to give it a little serious thought and attention, my mission will have been fulfilled.

I am sure that, if you give it this thought, you will see the necessity of every hospital having upon its visiting staff a thoroughly competent dental surgeon, or a dental-interne and one or two specially trained nurses who will, under his direction, care for the teeth and mouths of the seriously ill and the bed-ridden patients who, by reason of their infirmities, are unable to care for themselves, and thus, by a proper hygienic regime, prevent much suffering, relieve acute pair when present, arrest in its incipiency the ravages of dental caries, and keep the other oral tissues in a comparatively healthy condition.

COMPLETE REMOVAL OF PAROTID GLAND WITHOUT INJURY TO FACIAL NERVE.*

By J. HENRY BARBAT, M. D., San Francisco.

The complete removal of the parotid gland is indicated in cases of malignant growth, and according to most authorities on the subject, necessitates the sacrifice of the facial nerve. When the growth is limited to the parotid, and the tumor not too large, it is feasible to save the facial nerve and avoid a most distressing deformity. This can be accomplished by a careful dissection of the nerve through the parotid tissue, after finding one of its branches as far from the malignant focus as possible. The branch is then traced back to the main nerve and then worked out exactly as in the dissecting room. This can usually be accomplished without cutting through the growth proper, as we find that the nerve fibres are pushed to one side instead of being involved in the malignant process. Even when nerve fibres are found passing directly through malignant tumors we very often find that the disease process has not invaded the nerves, and with correct technic it is possible to cut them out without running any serious risk of implanting malignant cells in the surrounding tissues.

Tumors of the parotid, exclusive of retention cysts, are in the majority of cases of the endothelial

type. If allowed to grow, a large proportion of these endotheliomata eventually become malignant. For this reason it is the duty of the surgeon to advise removal of these growths immediately, and it the pathological report shows the tumor to be of the mixed variety, complete removal of the parotid is indicated.

Miss B., referred to me by Doctor George H. Evans, strained her neck two years before the onset of the present trouble, and shortly after noticed a small lump in front of the right ear. Occasional attacks of slight pain, but no tenderness. The tumor has been growing steadily, and the patient seeks relief on account of the deformity produced. Examination shows a firm mass one and a half inches in diameter in front of the right ear, freely movable under the skin and over the deep structures, and evidently in the substance of the parotid gland. Palpation gives a sensation of very thick contents. No tenderness.

The first operation was done on the 19th of April, 1915. A small incision was made directly over the swelling, cutting through the gland substance into the tumor. Ten c.c. of thick gelatinous material was squeezed out, followed by very free bleeding. The cavity was packed with a strip of gauze. The gelatinous material was submitted to Drs. Ophüls and Knapp, who reported that the sections show mucous tissue in which there are many irregular, freely anastomozing spaces filled with atypical cells of epithelial type. Diagnosis, Endothelioma of parotid gland (mixed tumor).

With this diagnosis it was decided to remove the entire gland and the operation was done one week after the first one. The original incision was prolonged, and the dissection of the parotid begun from below keeping well outside the capsule. The first nerve encountered was the posterior auricular, which was dissected free and held to one side. The supramaxillary branch was next picked up and dissected back through the gland to its junction with the buccal and inframaxillary branches, which were then dissected forward until they emerged from the anterior edge of the gland. The external carotid was ligated doubly and cut, just before its terminal division, and the deep temporal vein tied.

The temporofacial division of the facial nerve was then dissected forward through the gland, the upper ends of the temporal and internal maxillary arteries tied and the gland removed, skin closed with horsehair and silkworm gut drain placed at lower angle. Paralysis of the facial muscles was complete. The wound healed without any complications, and massage and electricity were instituted two weeks after the operation.

The first evidence of returning motion occurred on June 21, eight weeks following operation, in the depressor anguli oris. This was followed in a few days by motion in the risorius. Next came the elevators of the upper lip and intrinsic nasal muscles, then the orbicularis palpebrarum and corrugator supercilii. The last muscle to be completely restored was the orbicularis oris, evidenced

^{*} Read at the St. Luke's Hospital Clinical Evening, San Francisco County Medical Society, December 7, 1915.

by the patient's ability to whistle. This occurred about 18 weeks after the operation.

Discussion.

Dr. Alfred Newman: Dr. Barbat said that in the case of a mixed tumor of the parotid—even a small tumor—it is necessary to do this radical operation. I operated on one of these tumors of the parotid, a small tumor about the size of a walnut, situated in front of the ear, which I mistook for a wen. I operated in the office under local anesthesia, and made a cosmetic incision about the angle of the jaw. After I got into the tumor, I saw it was not a wen, but something with tentacles firmly anchored in the substance of the parotid, which is typical of the capsule of such growths. The capsule burst and the tumor masses poured out. All that was left to do was to curette it out, put in a drain and sew up the wound. That was seven years ago, and fortunately the growth has not yet returned.

These things usually run in pairs, and shortly after I got another patient with a similar tumor, but this time I made the diagnosis beforehand. I operated it with the thermocautery, simply cutting the tumor out with the red-hot cautery and closing up the wound at once. This case has also remained well.

CASE REPORTS.*

By PAUL S. CAMPICHE, M. D., San Francisco.

The first man fell down in a mine and sustained several injuries. He was treated four months in another state, then he came to San Francisco. In March 1915 I examined him. The left elbow was completely ankylosed at an angle of 165 degrees, evidently as the consequence of a traumatic infection. The right leg had a shortening of nearly three inches of which two and one-quarter were due to a fracture of the shaft of the femur, and half an inch due to the fracture of the tibia and fibula. This last fracture was left alone as the general alignment of the tibia was good, in spite of the slight shortening. The right femur, which had an angular deformity and much shortening, was treated by linear osteotomy with hammer and chisel, and the leg put in Heusner's extension (with flannel and rosin solution).

For the ankylosis of the left elbow I did (the same day) a resection with arthroplasty with an attached flap of fascia taken from the back of the arm

You see the result now. The motion of the left elbow is perfect. As to the femur, the X-rays show that the shortening is now only one-half an inch. Counting the tibia this leaves a total shortening of one inch for the whole leg. This is the best we could do, owing to the marked retraction of the muscle which had taken place during the four months. The patient could not walk even with crutches, and was carried into my office by some of his friends, so that in spite of the slight shortening, he is well pleased with the result.

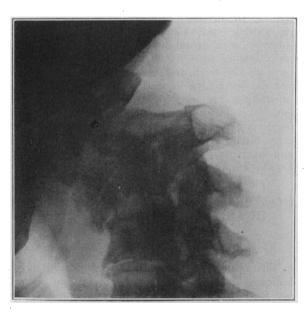
The second patient had a transverse fracture of the patella, which I wired on October 16, 1914.

The test for a good result for fractures of the patella is to have the patient climb on a chair with the bad leg first. You see that he can do that. I prefer silver wire to catgut in suturing the patella, because it allows us to move the joint two or three days after the operation (which I think would not be safe with catgut), and of course the early movements insure a much more rapid recovery of the function of the joint.

The third patient is a very simple case. He had a fracture of the humerus with muscular in-

terposition which I diagnosed by the absence of crepitus and which was confirmed by the X-ray's plate. The indication to operate was absolute here. I dissected the two muscles out of the way and wired the two fragments and got solid union in five weeks. This shows in my opinion how unnecessary the use of splints is when we can get a solid union by a much more simple procedure, using only a bit of silver wire. Of course the use of external splints is most important. In this case we used the classic cardboard dressing.

The last case is the one of a gentleman 74 years old, who noticed about a year ago, without injury, fall, or any other cause, that his head was dropping forward. When we saw him first his lower jaw was resting on his sternum. There was a marked kyphosis of the cervical spine; the forked spinous process of the axis could be felt, but above that the occipital bone seemed sharply displaced forward. The head resting on the sternum, we could not explore the spine from the mouth, as the patient could not open his mouth. The movements were very limited but not very painful. There was no paralysis of any kind.



The excellent X-ray picture taken by Mr. Sabalot, the radiologist of the French Hospital, confirmed our diagnosis of forward dislocation of the head. The odontoid process could not be seen and had apparently been destroyed and the atlas carrying the head had slipped forward. The medulla was bent at a right angle. The absence of nervous symptoms was probably due to the fact that the trouble came on very slowly.

We have thought of a secondary neoplasm but could not find any primary lesion. The fact that he moves without much pain speaks against tuberculosis. We suspect that the odontoid process has been destroyed by some gumma and the fact that he has improved since he takes iodide of potassium seems to confirm the view.

Dr. T. T. Watkins: I think Dr. Campiche is to be congratulated, speaking generally, upon his results. The femur case is a good result and satisfactory for that sort of work.

The elbow case is interesting by reason of the fact that the elbow is, perhaps, the only joint in which most of us have had any success with the arthroplasty, as adopted by Dr. Murphy. You will notice there is a good deal of side to side play. You will notice, also, that he has very little strength as yet. However, I think that he will, in time, reacquire considerable strength in

^{*} Read before the San Francisco County Medical Society, November 16, 1915.